

REMARKS

By this Amendment, claims 1-14 have been amended. Claims 1-14 are pending. Reconsideration and allowance of the present application in view of the above amendments and following remarks are respectfully requested.

Claims 1-14 are rejected under 35 U.S.C. 102(b) over Joong et al. (U.S. Patent No. 6,134,433). The rejection is respectfully traversed because Joong et al. fail to disclose, teach or suggest all the features recited in the rejected claims.

Joong et al. fail to disclose, teach or suggest transmitting a response message from the subscriber database to the forwarding exchange, the message comprising data indicating the call forwarding, forwarding number and a basic service code as recited in claim 1 and further, similarly recited in independent claims 2 and 4 with respect to transmitting from the home location register and the visitor location register respectively.

Joong et al. fail to disclose, teach or suggest transmitting a basic service code to the first exchange in connection with a response message to a routing information request as recited in independent claim 5. Joong et al. also, fail to disclose, teach or suggest deriving a basic service code from a response message transmitted by the home location register to the first exchange in response to a subscriber data request as recited in independent claim 7. Further, Joong et al. fail to disclose, teach or suggest deriving a basic service code from basic service data that is transmitted in connection with a response message transmitted from the visitor location register to the exchange in response to a subscriber data request in independent claim 11.

In addition, Joong et al. also fail to disclose, teach or suggest implementing call routing to the forwarding number according to the basic service code as recited in claims 1, 2, 4, 7 and 11.

Joong et al. disclose that their system requires that the type of call be identified to the HLR/SCP (Home Location Register/Service Control Point). To accomplish this, the calling

party may perform a two stage dialing procedure in which different pilot numbers are utilized to identify different types of calls (Column 5, lines 57-61). Alternatively, the type of call may be identified by assigning different numbers to the called mobile station, depending on the type of call made (Column 6, lines 10-12). Once the type of call is identified, the HLR/SCP provides the relevant transfer number to the mobile switching center (MSC) which then routes the call to the transfer number (Column 5, lines 42-44).

Joong et al does not disclose, teach or suggest transmitting a basic service code to an exchange from a subscriber database, home location register (HLR), or visitor location register (VLR) as provided, for example, in claims 1, 2, 4 and 5. Joong et al. fail to disclose, teach or suggest deriving a basic service code from a response message or from basic service data transmitted in connection with a response message, the response message transmitted by a HLR or from VLR to an exchange as provided, for example, in claims 7 and 11.

Further, Joong et al. teaches mobile switching center (MSC) routing based only on the transfer number as opposed to a basic service code as recited in the independent claims 1, 2, 4, 7 and 11. In fact, the MSC routing disclosed by Joong et al. teaches away from implementing call routing to the forwarding number according to a basic service code as recited in independent claims 1, 2, 4, 7 and 11.

Therefore, independent claims 1, 2, 4, 5, 7 and 11 and all the remaining claims dependent thereon are patentable over Joong et al. Thus, withdrawal of the rejection of claims 1-14 under 35 U.S.C. §102(b) is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned **“Version with markings to show changes made”**.

All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

If any points remain in issue which may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Amended) A method for implementing call forwarding in a mobile system comprising at least one forwarding exchange [(GMSC; VMSC)] for carrying out call forwarding on the basis of subscriber data related to the call forwarding[,] and at least one subscriber database [(HLR; VLR)] for storing the subscriber data related to the call forwarding, the method comprising[the steps of]:

receiving at the forwarding exchange [(GMSC; VMSC)] a call set-up message addressed to a subscriber in the mobile system[,];

performing a subscriber data request to the subscriber database [(HLR, VLR),];

transmitting a response message from the subscriber database [(HLR; VLR)] to the forwarding exchange [(GMSC; VMSC)], the message [containing] comprising data indicating the call forwarding, [and] a forwarding number[, characterized by providing the forwarding exchange (GMSC; VMSC) with] and a basic service code[,]; and

implementing call routing to the forwarding number according to the basic service code.

2. (Amended) A method for implementing call forwarding in a mobile system comprising at least a first exchange [(GMSC)] for carrying out call forwarding on the basis of subscriber data related to the call forwarding[,] and at least one home location register [(HLR)] connected to the first exchange for storing the subscriber data related to the call forwarding, the method comprising [the steps of]:

receiving at the first exchange [(GMSC)] a call set-up message addressed to a subscriber in the mobile system[,];

requesting routing information from the home location register [(HLR),];
transmitting a response message from the home location register [(HLR)] to the first exchange [(GMSC)], the message [containing] comprising data indicating the call forwarding, [and] a forwarding number, [characterized by]
[providing the forwarding exchange (GMSC) with] and a basic service code indicating the basic service related to the call [in connection with the call set-up message or a response message to said routing information request,]; and
implementing call routing to the forwarding number according to said basic service code.

3. (Amended) A method according to claim 2, [characterized in that] wherein the basic service code is forwarded from the home location register [(HLR)] to the first exchange [(GMSC)] via an extension added to the response message.
Send_Routing_Info_RES to the routing information request.

4. (Amended) A method for implementing call forwarding in a mobile system comprising at least one exchange [(VMSC)] for carrying out call forwarding on the basis of subscriber data related to the call forwarding[,]
and at least one visitor location register [(VLR)] for storing the subscriber data related to the call forwarding, the method comprising:
[the steps of]
receiving at the exchange [(VMSC)] a call set-up message addressed to a subscriber in the mobile system;
providing a subscriber data request to the visitor location register [(VLR)] connected to the exchange[,];

transmitting a response message from the visitor location register [(VLR)] to the exchange [(VMSC)], the message [containing] comprising data indicating the call forwarding, [and] a forwarding number [characterized by]

[providing the forwarding exchange (VMSC) with] and a basic service code [in connection with the call set-up message or said response message,] ; and

implementing call routing to the forwarding number according to the basic service code.

5. (Amended) A home location register [(HLR)] connected to a first exchange [(GMSC)] in a mobile system, [characterized in that] wherein the home location register [(HLR)] is arranged to transmit a basic service code to the first exchange [(GMSC)] in connection with a response message to a routing information request, the data indicating the basic service related to the call.

6. (Amended) A home location register [(HLR)] according to claim 5, [characterized in that] wherein the home location register [(HLR)] is arranged to forward the basic service code to the first exchange [(GMSC)] by means of an extension added to the response message Send_Routing_Info_RES to the routing information request.

7. (Amended) A first exchange [(GMSC)] in a mobile system, comprising means for transferring a call to a forwarding number, [characterized in that] wherein the exchange is arranged to derive a basic service code from the call set-up message or from a response message transmitted by the home location register [(HLR)] to the first exchange [(GMSC)] in response to a subscriber data request; and

the exchange [(GMSC)] is arranged to route the call to the forwarding number according to the basic service code.

8. (Amended) An exchange according to claim 7, [characterized in that] wherein the exchange is arranged to receive the basic service code in an extension added to the response message Send_Routing_Info_RES to the routing information request.

9. (Amended) An exchange [(GMSC)] according to claim 7, [characterized in that] wherein said forwarding number is the number of a Voice Mail Service center having several lines, and that said exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code.

10. (Amended) An exchange [(GMSC)] according to claim 7, [characterized in that] wherein the exchange [(GMSC)] is arranged to subject the forwarding number to a conversion selected according to the basic service code.

11. (Amended) An exchange [(VMSC)] in a mobile system, comprising means for transferring a call to a forwarding number, [characterized in that] wherein the exchange is arranged to derive a basic service code from basic service data that indicates the basic service of the call and that is transmitted in connection with the call set-up message or a response message transmitted from the visitor location register [(VLR)] to the exchange [(VMSC)] in response to a subscriber data request, and

the exchange [(VMSC)] is arranged to perform routing to the forwarding number according to said basic service code.

12. (Amended) An exchange according to claim 11, [characterized in that] wherein the exchange is arranged to derive the basic service code at least on the basis of the bearer capability information element contained in the basic service data.

13. (Amended) An exchange [(VMSC)] according to claim 11, [characterized in that] wherein said forwarding number is the number of a Voice Mail Service center having several lines, and that said exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code.

14. (Amended) An exchange [(VMSC)] according to claim 11, [characterized in that] wherein the exchange [(VMSC)] is arranged to subject the forwarding number to a conversion selected according to the basic service code.